

Annex B

Description of Wire Types

This annex provides a description of each of the wire types used to fabricate new wire harnesses. Insulation materials, conductor type, and drawings illustrating the wire construction are provided.

Wire Specifications (1 of 2)					
Mil Spec #	AWG	Jacket	Additional Layer	Insulation	Conductor
M22759/32-18-9	18	No Jacket	na	Crosslinked ETFE (Ethylene-tetrafluethylene copolymer)	Tin Coated Copper
M22759/32-20-7	20	No Jacket	na	Crosslinked ETFE (Ethylene-tetrafluethylene copolymer)	Tin Coated Copper
M22759/32-22-9	22	No Jacket	na	Crosslinked ETFE (Ethylene-tetrafluethylene copolymer)	Tin Coated Copper
M5086/1-18-9	18	Clear Nylon	na	Polyvinyl Chloride	Tin Coated Copper
M5086/1-20-9	20	Clear Nylon	na	Polyvinyl chloride	Tin Coated Copper
M5086/1-22-9	22	Clear Nylon	na	Polyvinyl chloride	Tin Coated Copper
M5086/2-18-9	18	Clear Nylon	Glass Fiber Braid with Finisher	Polyvinyl chloride	Tin Coated Copper
M81044/9-20-9	20	Polyalkene-Crosslinked PVDF (Polyvinylidene Flouride)	na	Crosslinked Polyalkene	Tin Coated Copper
M81044/9-22-9	22	Polyalkene-Crosslinked PVDF (Polyvinylidene Flouride)	na	Crosslinked Polyalkene	Tin Coated Copper
M81381/7-20-9	20	Modified Aromatic Polyimide Resin Coating	Fluorocarbon Polyimide Tape	Fluorocarbon Polyimide Tape	Silver Coated Copper
M81381/7-22-8	22	Modified Aromatic Polyimide Resin Coating	Fluorocarbon Polyimide Tape	Fluorocarbon Polyimide Tape	Silver Coated Copper

	Wire Specifications (2 of 2)						
Mil Spec #	Conductor Diameter (inches)		Finished Wire Diameter (Inches)	Weight (lbs/1000 ft (max)	Voltage Rating	Temp Rating	Comments
	Min	Max					
M22759/32-18-9	.046	.049	0.06 ±.002	6.5	600 V	150° C	flame retardent, self extinguishing notch and arasion
M22759/32-20-7	.037	.039	0.05 ±.002	4.3	600 V	150° C	flame retardent, self extinguishing notch and arasion
M22759/32-22-9	.029	.031	0.043 ±.002	2.8	600 V	150° C	flame retardent, self extinguishing notch and arasion
M5086/1-18-9	.046	.051	0.088 ±.004	8.6	600 V	105° C	resistant to water, aircraft fuels,a hydraulic fluid
M5086/1-20-9	.037	.041	0.078 ±.004	6.3	600 V	105° C	resistant to water, aircraft fuels,a hydraulic fluid
M5086/1-22-9	.029	.033	0.068 ±.004	4.4	600 V	105° C	resistant to water, aircraft fuels,a hydraulic fluid
M5086/2-18-9	.046	.051	0.095 ±.005	9.5	600 V	105° C	resistant to water, aircraft fuels,a hydraulic fluid
M81044/9-20-9	.037	.041	0.07 ±.003	5.5	600 V	150° C	flame retardent, self extinguishing notch and arasion
M81044/9-22-9	.029	.033	0.062 ±.003	3.9	600 V	150° C	flame retardent, self extinguishing notch and arasion
M81381/7-20-9	.037	.038	0.050 ±.001	4.3	600 V	200° C	flame retardent,
M81381/7-22-8	.029	.030	0.0425 ±.0015	2.8	600 V	200° C	flame retardent,

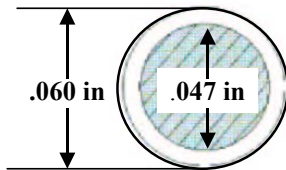
MIL-W-22759/32 - 18 - 9

Mil Spec

Gauge

Color

Temp Rating: 150° C
600V



No Jacket

Insulation: Crosslinked ETFE
(Ethylene-tetrafluoroethylene copolymer)



Conductor: Tin Coated Copper

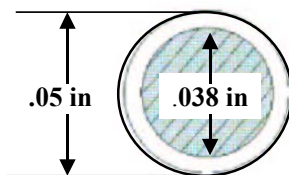
MIL-W-22759/32 - 20 - 7

Mil Spec

Gauge

Color

Temp Rating: 150° C
600V



No Jacket

Insulation: Crosslinked ETFE
(Ethylene-tetrafluoroethylene copolymer)



Conductor: Tin Coated Copper

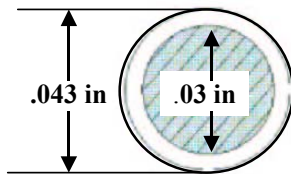
MIL-W-22759/32 - 22 - 9

Mil Spec

Gauge

Color

Temp Rating: 150° C
600V



No Jacket

Insulation: Crosslinked ETFE
(Ethylene-tetrafluoroethylene copolymer)



Conductor: Tin Coated Copper

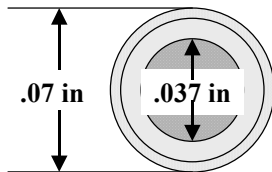
MIL-W-81044/9 - 20 - 9

Mil Spec

Gauge

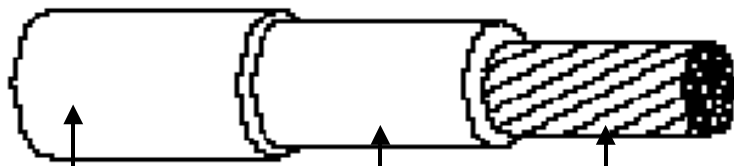
Color

Temp Rating: 150° C
600V



Insulation: Polyalkene - Crosslinked PVDF
(Polyvinylidene Flouride)

Intermediate Layer: Crosslinked Polyalkene



Conductor: Tin Coated Copper

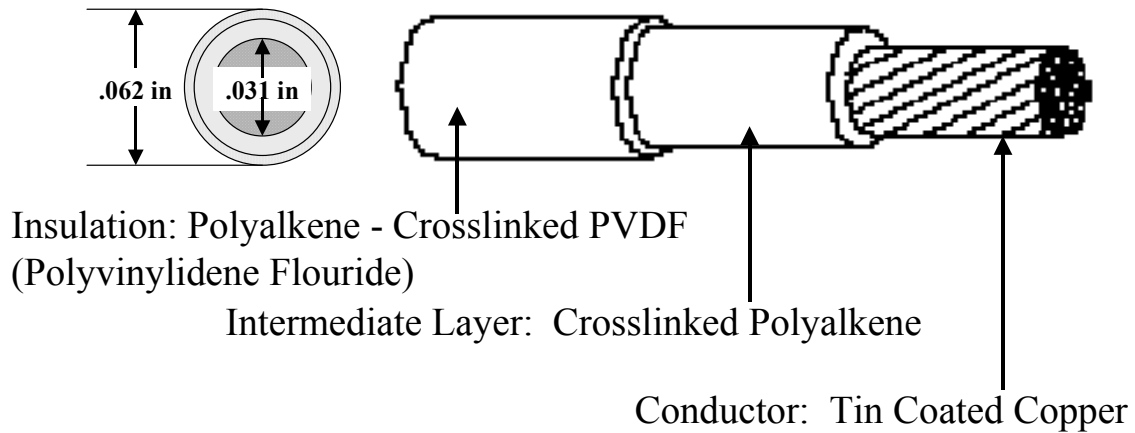
MIL-W-81044/9 - 22 - 9

Mil Spec

Gauge

Color

Temp Rating: 150° C
600V



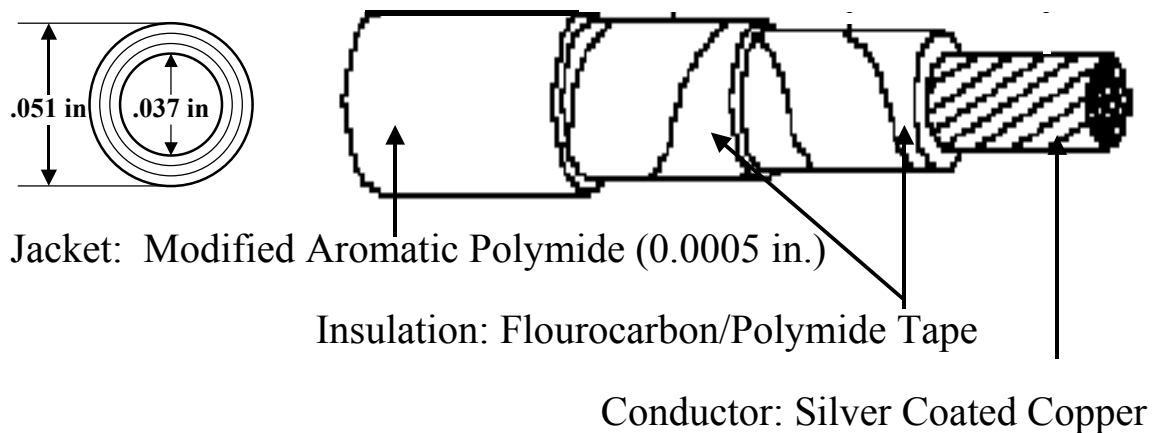
MIL-W-81381/7 - 20 - 9

Mil Spec

Gauge

Color

Temp Rating: 200° C
600V



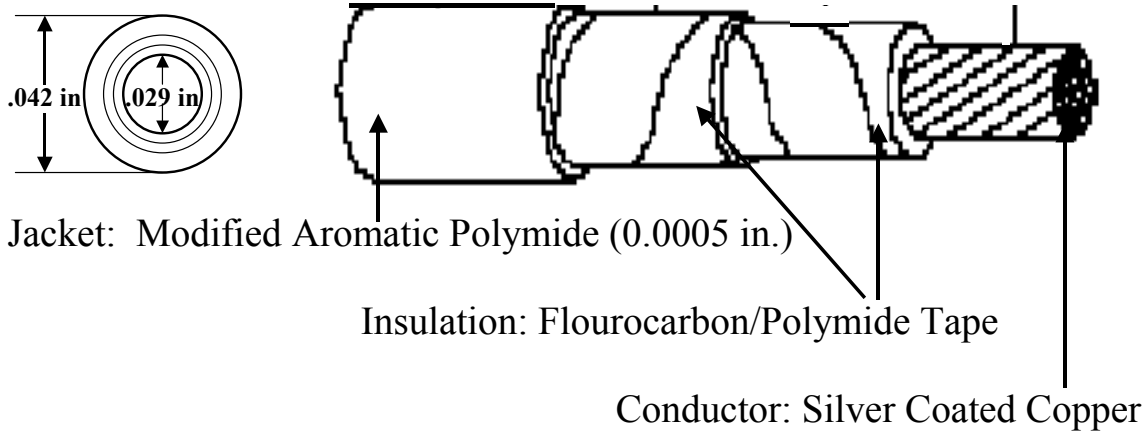
MIL-W-81381/7 - 22 - 8

Mil Spec

Gauge

Color

Temp Rating: 200° C
600V



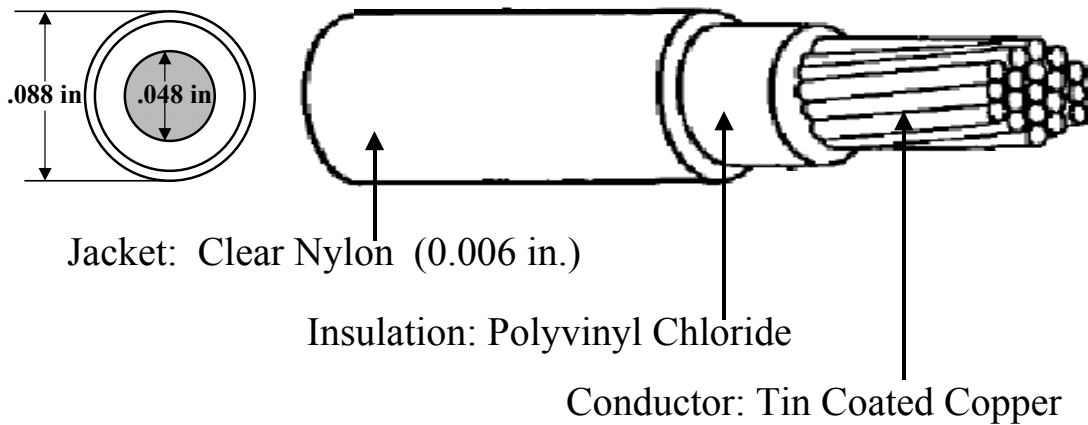
MIL-W-5086/1 - 18 - 9

Mil Spec

Gauge

Color

Temp Rating: 105° C
600V



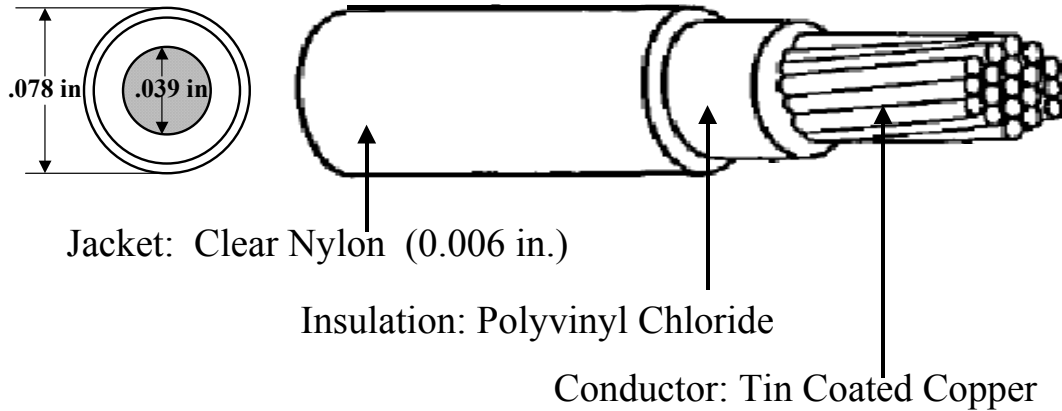
MIL-W-5086/1 - 20 - 9

Mil Spec

Gauge

Color

Temp Rating: 105° C
600V



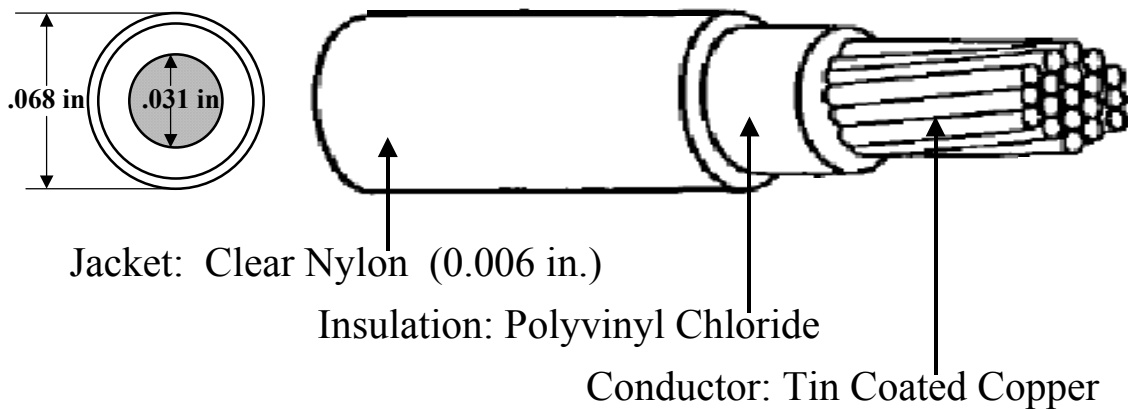
MIL-W-5086/1 - 22 - 9

Mil Spec

Gauge

Color

Temp Rating: 105° C
600V



MIL-W-5086/2 - 18 - 9

Mil Spec

Gauge Color

Temp Rating: 105° C
600V

